

U.S.C. 103(a) as being unpatentable over Wolf et al. in view of Fanchon et al. as applied to claims 1-23, 27, 28, 33-35, 37 above, and further in view of Garrison et al. (U.S. Patent 5,569,651).

## II. Rejections under 35 U.S.C. § 103(a)

A. In the Office Action, the Examiner rejected claims 1-23, 27-28, 33-35, and 37 under 35 U.S.C. § 103(a) as being unpatentable over Wolf et al. in view of Fanchon et al.. The Examiner alleged that Wolf teaches an anti-acne composition comprising a carrier, which may include protein and dendritic polymers. Emulsions, titanium oxide, stearic acid, and jojoba oil are also disclosed. Wolf does not teach or suggest the at least one nanopigment recited in the claims.

To provide the teachings missing from Wolf, the Examiner applied Fanchon, which teaches anti-acne compositions may contain antioxidants and nanopigments as active agents. The Examiner then alleged that it would have been obvious to combine the antioxidants and nanopigments of Fanchon with the anti-acne composition of Wolf to achieve Applicant's invention.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success.

Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See M.P.E.P. § 2143.

A *prima facie* case of obviousness has not been established because the Examiner has not met any, let alone all, of the three criteria set forth above. For example, one of ordinary skill in the art would not have been motivated to combine the teachings of Wolf and Fanchon to arrive at applicant's claimed invention, nor would there have been an expectation of success in making such a combination.

Applicant's invention is directed to a composition comprising at least one nanopigment and at least one of the specific polyamino polymers recited in claim 1. The selection of polyamino polymers are limited by the language of claim 1, as follows:

*... at least one polyamino polymer in said composition selected from:*

*(A) polyalkylenepolyamine polymers selected from:*

- (i) polyalkylenepolyamines;*
- (ii) alkyl derivatives of polyalkylenepolyamines;*
- (iii) addition products of alkylcarboxylic acids with polyalkylenepolyamines;*
- (iv) addition products of ketones and aldehydes with polyalkylenepolyamines;*
- (v) addition products of isocyanates and isothiocyanates with polyalkylenepolyamines;*
- (vi) addition products of alkylene oxide and polyalkylene oxide block polymers with polyalkylenepolyamines;*
- (vii) quaternized derivatives of polyalkylenepolyamines;*
- (viii) addition products of a silicone with polyalkylenepolyamines;*
- (ix) copolymers of dicarboxylic acid and of polyalkylenepolyamines;*

*(B) polyvinylimidazoles;*

*(C) polyvinylpyridines;*

*(D) addition products of 1-vinylimidazole monomers of formula (I): [as recited in claim 1]*

*in which:*

*-radicals R independently represent H or a linear or cyclic, saturated or unsaturated C<sub>1</sub>-C<sub>6</sub> alkyl radical,  
-n is an integer ranging from 1 to 3,  
with polyalkylenepolyamines (A)(i) to (A)(ix);  
(E)amino acid polymers with a basic side chain; and  
(F)crosslinked derivatives of polymers (A)(i) to (A)(ix), (B), (C), (D) and (E).*

The Examiner has pointed to no teaching in the references, nor does any exist, which would have motivated one of ordinary skill in the art to select at least one of the specific polyamino polymers recited in claim 1 from the large laundry list of possible polymers disclosed by Wolf, let alone make this specific selection and subsequently combine this polymer with nanopigments found in Fanchon in order to arrive at Applicant's claimed invention. Wolf teaches at least 25 possible polymers, plus incorporates an additional 13 U.S. patent disclosures, each of which contains a multitude of possible polymers from which to choose. A vast number of these polymers are outside the scope of the at least one polyamino polymer recited in the presently claimed invention.

Given this extensive list, the skilled artisan would not know which of the possible polymers taught by Wolf should or could be combined with the teachings of Fanchon. To make the correct combination even more unlikely, Fanchon teaches that either pigments or nanopigments may be used. Therefore, without some suggestion to choose the claimed combination of nanopigments and polyamino polymers from the literally thousands of possible combinations provided by the Wolf/Fanchon combination, the skilled artisan would not be motivated to arrive at applicant's claimed invention.

The mere fact that the references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. See M.P.E.P. § 2143.01. Thus, the fact that a claimed polymer may be encompassed by a disclosed generic teaching does not by itself render the use of that polymer obvious. Rather, some motivation to select the claimed species of polymer must be taught by the prior art. Because the required motivation is lacking for such a specific selection, a *prima facie* case of obviousness has not been made and the claimed invention is allowable over the cited prior art.

**B.** Claims 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wolf et al. in view of Fanchon et al. as applied to claims 1-23, 27, 28, 33-35, 37 above, and further in view of Garrison et al. Claims 24-26 depend from claim 1, and therefore also require the claimed polyamino polymer. Garrison et al. fails to provide the missing motivation needed for the Wolf and Fanchon combination. In fact, Garrison et al. is completely silent with respect to such a polyamino polymer. Therefore, claims 24-26 are allowable for at least the reasons argued above for claim 1.

### **III. Conclusion**

In view of the foregoing amendments and remarks, Applicant respectfully requests the reconsideration and reexamination of this application and the timely allowance of the pending claims.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

By: 

Thomas L. Irving  
Reg. No. 28,619

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